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Jatropha Leaf Miner Stomphosistis thraustica Meyrick (Gracillaridae; Lepidoptera) as medicinal insect in Chhattisgarh, India. Updated Version.

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Pankaj Oudhia

Introduction

Entomophagy and Entomotherapy are well known in Asia since generations. Unfortunately not much work has been done to document valuable Traditional Medicinal Knowledge about Insects. Pankaj Oudhia is documenting this knowledge since year 1990. The present note is updated version of his previously published online research document available through pankajoudhia.com.

Keywords: Entomophagy; Entomotherapy; Medicinal Insects; Ayurveda; Chhattisgarh;

Ratanjot (Jatropha curcas) is a shrub or small tree, native to tropical America and is now naturalized in many parts of India. It is under cultivation as promising petro crop in many parts also. In Chhattisgarh, Jatropha is considered as medicinal herb. The natives and traditional healers have in depth traditional medicinal knowledge about this herb. I have mentioned in previous articles that on the basis of different agro-climatic region, Jatropha Plant types can be categorized according to these regions. Besides Jatropha curcas, many other species also grow naturally in Chhattisgarh. The traditional healers of Chhattisgarh use all parts of Jatropha both internally as well as externally as medicine but according to them there is a limitation in use of its leaves specially in case of internal use. The over or wrong dose results in harmful effects. Since long time, the healers were in search of herbs that can nullify the harmful effects of Jatropha leaves. The increasing infestation of Jatropha Leaf Miner Stomphosistis thraustica in Jatropha is although a bad news for the Jatropha growers but it is good news for the traditional healers utilizing the insect particularly the green coloured larva. The infestation of this insect has been observed by the researchers during 1997-1998 for the first time in Chhattisgarh Plains but the traditional healers using this insect as medicinal insect are aware of its presence since decades, in Chhattisgarh. They claim that this insect is present in almost all Jatropha regions. When this insect started attack on cultivated Jatropha the researchers paid attention on it. Like other pest, they are not thinking on its utilization aspect. They are screening the lethal insecticides and ways to dump it in crop fields for its control. During the ethnobotanical surveys conducted in different parts of Chhattisgarh, I have noted that the traditional healers of Chhattisgarh Plains are using Jatropha Leaf Miner as medicinal insect more commonly than the healers of other regions. The larvae collected just before the pupation is considered best for the preparation of medicine. The newly borne larvae are not used. After the collection of Larvae, it is dried in shade and after drying it is converted into dry powder and kept for future use. The traditional healers use this powder internally as Galactgoggue. The powder is given internally with lukewarm water in order to increase the flow of milk in lactating women. Many healers use the decoction of powder to get more promising effects. The use of powder gives more promising results as compared to the Jatropha leaves, the healers claimed. Its use also reduces the duration of treatment. The traditional healers of Southern Chhattisgarh use the larvae in treatment of common fever. For the preparation of medicine they dry the larvae in moon light and converted it into powder. This powder is taken internally in combination with other herbs mainly Kalmegh (Andrographis paniculata). According to the healers, in herbal combination, the larvae powder plays an important role. The traditional healers are in search of new uses of Jatropha Leaf Miner. I am in regular contact with these healers. You will get more details in coming articles.

[New comments added on April, 2014: Through recent surveys I have collected new information about medicinal uses of Stomphosistis collected from Jatropha. The Traditional Healers of North add it as secondary ingredient in Traditional Formulations used for treatment of kidney diseases whereas the Healers of South Chhattisgarh use it as nonary and senary ingredients in Formulations for Kidney diseases. In combination with wild flowers Stomphosistis is used in form of decoction to treat kidney pain. Many Healers claim that they add it as important ingredient in Formulations used for management of Renal Calculi specially for its prevention. I have documented information about over 65 Formulations in which it is used with Medicinal Rice Tenduphool based Formulations. When Kodomillet based Formulations are used for treatment of Obesity Stomphosistis is added as

octonary ingredient. In Sida based Formulations for Liver diseases it is added as tertiary ingredient. The Healers of Odihsa are also aware of its medicinal uses but I have noted that the Formulations having it are used less frequently by them, The Healers of Jharkhand are also aware of this medicinal insect. In treatment of Mirgi i.e. Epilepsy they use Butea and Mitragyna based Formulations. In these Formulations Stomphosistis is added as fresh ingredient. In Formulations used for treatment of Vitex Toxicity it is added as key ingredient. Many Healers informed about its possible use in management of long term Datura Toxicity. For complete Formulations and dosage please visit pankajoudhia.com]

The herb collectors of Chhattisgarh informed me that many other insect species infest the Jatropha plants and few healers are aware of the medicinal properties of these insects. I am trying my best to meet these healers and document the traditional knowledge. The infestation of Jatropha Leaf Miner is reported in many parts of India but the researchers have not focused their studies on utilization aspect of this so called problematic insect. Through this article I would like to request the researchers to come forward and start research on this important aspect after meeting with the traditional healers of their regions.

Thank you very much for reading the article.

Related References

Oudhia, Pankaj and Thakur, B.S. (1996) New record of the leaf beetle on a weed. Current Research 25: 218.

Oudhia, P. (1997) Evaluation of host specificity of Blumea leaf beetle (Chrysolina sp. nr. madrasae Jackoby). Insect Environment. 3 (3): 80.

Oudhia, P. and Ganguali, R.N. (1998). Is Lantana camara responsible for Sal-borer infestitation in M.P.? Insect Environment. 4 (1): 5.

Oudhia, P. (1998). Medicinal insects and spiders. Insect Environment. 4(2): 57-58

Banwarilal and Oudhia P. (1999). Beneficial effects of Allelopathy: I. Crop Production.Indian J. Weed Sci. 31(1&2): 103-105

Oudhia, P. (1999) Effect of some botanicals on hatchability of Blumea leaf beetle eggs. Insect Environment. 4(4): 154

Oudhia, P. (1999). Studies on Allelopathy and medicinal weeds in chickpea fields. International Chickpea and Pigeonpea Newsletter (ICRISAT) 6: 29-33.

Oudhia, P. (1999) Blumea leaf beetle in Chhattisgarh Plains. Insect Environment. 5 (1): 22.

Oudhia, P. and Ganguli, J. (1999). Outbreak of Tortoise beetle Aspidomorpha miliaris F. (Coleoptera; Chrysomelidae) in Chhattisgarh plains. Insect Environment 5(3): 110-111.

Oudhia, P. (1999). Effects of Total Solar Eclipse on activities of some insects and mites. Insect Environment 5(3): 113-114.

Oudhia, P. (1999). Traditional medicinal knowledge about Red velvet mite Trombidium sp. (Acari : Trombidiidae) in Chhattisgarh. Insect Environment 5(3): 113.

Oudhia P., Pandey N. and Tripathi R.S. (1999). Allelopathic effects of obnoxious weeds on germination and seedling vigour of hybrid rice. Internaitonal Rice Research Notes (IRRI). 24(2): 36.

Oudhia P, Pandey N, Ganguli RN & Tripathi RS (1999) Gall midge (Orseolia oryzae) infestation in hybrid rice as affected by agronomical practices. Insect Environment 4: 123–124.

Oudhia P, Pandey N, Tripathi RS & Ganguli RN (1999) Effect of nitrogen and water management practices on gall midge (Orseolia oryzae) infestation in hybrid rice. Insect Environment 4: 119–120.

Oudhia P, Pandey N, Tripathi RS & Ganguli RN (1999) Reaction of hybrid rice varieties to gall midge (Orseolia oryzae).. Insect Environment 4 (4): 134.

Oudhia P, Pandey N, Tripathi RS & Ganguli RN (1999) Effect of different fertility levels on the gall midge (Orseolia oryzae) infestation.. Insect Environment 4 (3): 66-67.

Oudhia, P. (2000). Studies on host specificity and preference of the metallic coloured Tortoise beetle (Aspidomorpha miliaris F.) Ecol. Env. And Cons. 6(3):357-359.

Oudhia, P. (2000). Effects of leaf extracts on Metallic Coloured Tortoise beetle Aspidomorpha miliaris F. Insect Environment 5(4): 165.

Oudhia, P. (2000). Toxic effects of Parthenium leaf extracts on Aspidomorpha miliaris F. and Zonabris pustulata Thunb. Insect Environment 5(4): 168.

Oudhia, P. and Ganguli, R. N. (1999) Chrysolina madrassae: A potential bio-control agent for Blumea lacera. VIII Biennial Conference of Indian Society of Weed Science held at BHU, Varanasi 5-7 Feb. p 134.

Oudhia, P. (2000). Evaluation of some botanicals against orange banded blister beetle (Zonabris pustulata Thunb.). Crop Research 20(3):558-559

Oudhia,P.(2000).Record of Orange Banded Blister Beetle Zonabris pustulata Thunb.(Coleoptera: Meloidae) on Safed Moosli(Chlorophytum borivilianum).Insect Environment.6(3):138

Oudhia,P.(2000). Effect of some leaf leachates on hatchability of Blumea leaf beetle(Chrysolina madrasae Jackoby) Eggs. Indian J. Weed Sci. 32(3&4):206-207.

Oudhia, P. (2000). Traditional medicinal knowledge about green leaf hopper, Nephotettix spp. in Chhattisgarh (India). International Rice Research Notes.25 (3):40

Oudhia, P. (2000). Common housefly Musca nebulo Wiedemann (Diptera: Muscidae) as medicinal insect in Chattisgarh. Insect Environment. 6(1):36-37.

Oudhia, P. (2000). Germination and seedling vigour of kodomillet as affected by Allelopathy of Ipomoea carnea Jacq..Indian J. Plant Physiol. 5(4) NS :383-384.

Oudhia, P. (2001). Traditional medicinal knowledge about Pod borer Helicoverpa armigera in Chhattisgarh, India. International Chickpea and Pigeonpea Newsletter.8:14-15.

Oudhia, P. (2001). Medicinal insects of Kharif crops and weeds of Chattisgarh (India). VII National Science Conference, Bharitya Krishi Anusandhan Samitee, Directorate of Cropping System Research, Meerut, India, 12-14 April.

Oudhia, P. (2001). Record of Aphis craccivora Koch. (Hemiptera: Aphididae) on medicinal crop Mucuna pruriens L. in Chhattigarh (India). Insect Environment. 7(1):24.

Oudhia, P. (2001). Traditional medicinal knowledge about Bed Bug Cimex lectularius L.(Hemiptera: Cimicidae) in Chhattisgarh (India). Insect Environment. 7(1):23.

Oudhia, P. (2001). Phyllotreta crucifera Goeze: A new pest of medicinal crop Lepidium sativum L. in Chhattisgarh (India).In: Souvenir cum Abstracts. National Research Seminar on Herbal Conservation, Cultivation, Marketing and Utilization with Special Emphasis on Chhattisgarh, 'The Herbal State'. Srishti Herbal Academy and Research Institute (SHARI) and Chhattisgarh Minor Forest Produce (Trading & Dev.) Co-operative Fedration Ltd., Raipur (India), 13-14 December, 2001. p.74.

Oudhia, P. (2001). Improved cultivation practices for medicinal crops: glimpses of research of farmers' fields in Chhattisgarh (India).In: Oudhia P, editor. Souvenir-cum-abstracts. National Research Seminar on Herbal Conservation, Cultivation, Marketing and Utilization with Special Emphasis on Chhattisgarh, The Herbal State, Srishti Herbal Academy and Research Institute (SHARI), 13-14 December 2001. p 44.

Oudhia, P. (2001). Evaluation of Allelopathic effects of some fruit tree leaf extracts on emergence and seedling vigour of Lathyrus var.Biol-212.Legume Res. 24(3):207-208.

Oudhia, P. (2001). Germination and seedling vigour of wheat as affected by allelopathy of some obnoxious weed. Agric. Sci. Digest. 21(4):275-276.

Oudhia, P. (2002). Traditional medicinal knowledge about common insects and mites in India. Eco. Env and Consv. 8(4):339-340.

Oudhia, P. (2002). Rice-Acorus intercropping: a new system developed by innovative farmers of Chhattisgarh (India). International Rice Research Notes. Notes. 27 (1):56.

Oudhia, P. (2002). Traditional medicinal knowledge about Red Ant Oecophylla smaragdina (Fab.) (Hymenoptera: Formicidae) in Chattisgarh, India. Insect Environment.8(3):114-115.

Oudhia, P. (2002). Traditional medicinal knowledge about Fireflies, Photuris sp.(Coleoptera: Lampyridae)in Chhattisgarh (India). Insect Environment, Vol.8 (1):25

Oudhia, P. (2005). Traditional Knowledge about medicinal insects and mites in Chhattisgarh, India: An overview. International Conference on "Promotion and Development of Botanicals with International Coordination: Exploring quality, safety, efficacy and regulations". February 25-26,

2005 Supported by: Drug Information Association, USA Secretariat: School of Natural Product Studies Jadavpur university, Kolkata 700032.)

Costa-Neto, E. M. (2005). Entomotherapy, or the medicinal use of insects. *Journal of Ethnobiology*, 25(1), 93-114.

Senthilkumar, N., Barthakur, N. D., & Rao, M. L. (2008). Bioprospecting with Reference to Medicinal Insects and Tribes in India: an Overview. *Indian Forester*, 134(12), 1575-1591.

Kumari, B., & Kumar, S. (2009). An insight into the ethnozoology of Panch Pargana area of Jharkand, India. *Journal of Threatened Taxa*, 1(8), 441-443.

Dossey, A. T. (2010). Insects and their chemical weaponry: New potential for drug discovery. *Natural product reports*, 27(12), 1737-1757.

Horgan, F. G., & Crisol, E. (2013). Hybrid rice and insect herbivores in Asia. Entomologia Experimentalis et Applicata, 148(1), 1-19.

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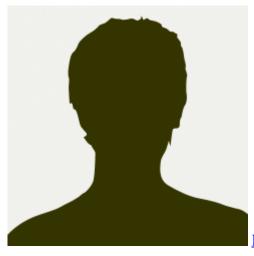
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